COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Valley Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

DRAFT

University of Virginia
Charlottesville, Virginia
Permit No. VRO40200

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, the University of Virginia has applied for a Title V Operating Permit for its Charlottesville, Virginia campus. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____
Michael F. Kiss
(540) 574-7822

Air Permit Manager:_____ Date:_____
Sharon G. Foley, P.E.

Regional Permit Manager:_____ Date:_____
Larry M. Simmons, P.E.

FACILITY INFORMATION

Permittee
University of Virginia
Charlottesville, Virginia

Facility
University of Virginia
P. O. Box 400228
Charlottesville, VA 22904-4228

NET ID No: 51-540-0003

SOURCE DESCRIPTION

SIC Code	Manufacturing Description
8221	Colleges/Universities

The University of Virginia (UVA) is a publicly funded institute for higher education located in Charlottesville, Virginia. UVA is an extensive campus with facilities including classrooms, dormitories, laboratories, medical center, athletic complexes, research facilities, and various support facilities. Emissions sources at UVA consist of a Main Heating Plant (MHP), a coal handling system, other fuel burning equipment, electrical generators, woodworking equipment and ethylene oxide sterilizers.

Main Heating Plant

The MHP currently consists of a total of five boilers of differing sizes to produce steam for heat and related university operations:

- Union Iron Works Coal-Fired Boiler with a maximum rated heat input capacity of 50 MMBtu/hr (Boiler No. 1)
- IBW Coal and Natural Gas-Fired Boiler with a maximum rated heat input capacity of 95 MMBtu/hr (Boiler No. 2R)
- Union Iron Works Coal-Fired Boiler with a maximum rated heat input capacity of 90 MMBtu/hr (Boiler No. 3)
- Keeler Natural Gas and Residual Oil-Fired Boiler with a maximum rated heat input capacity of 112.5 MMBtu/hr (Boiler No. 4)
- Keeler Coal and Natural Gas-Fired Boiler with a maximum rated heat input capacity of 112.5 MMBtu/hr (Boiler No. 5)

Coal Handling System

Coal is transported to the coal handling facility mostly via railcar, although a small amount is delivered by trucks. The coal handling system consists of four coal silos, four coal bunkers and miscellaneous coal conveyors and coal handling equipment.

Other Fuel Burning Equipment

Due to the extensive nature of the UVA academic campus it is not feasible for the Main Heating Plant to provide heat and steam to all of the contiguous buildings. Therefore, some facilities maintain separate furnaces and small boilers for the purposes of providing building heat and hot water. These smaller units burn either distillate oil or natural gas.

Electrical Generators

UVA maintains emergency electrical generators. The generators are fueled with diesel fuel, natural gas or No. 2 fuel oil. The generators range in size up to 1500 kilowatts. Operation of each emergency electrical generator is less than 500 hours per year.

Woodworking Equipment

Maintenance activities performed at UVA include woodworking. Manufacturing of wood furniture takes place at the Facilities Maintenance-Cabinet Shop. Small-job painting and finishing are performed in addition to woodworking activities. The actual woodworking operations generate particulate emissions, which in the case of the Facilities Maintenance-Cabinet Shop vent through a fan system with a filter.

Medical Equipment

UVA maintains two ethylene oxide sterilizers for hospital use. The sterilizers are located at the University's hospital and are used to sterilize various surgical and other medical equipment. These sterilizers are exempt from Subpart O MACT requirements under 40 CFR 63.360 (e).

COMPLIANCE STATUS

The facility is inspected once a year.

The University of Virginia entered into an Executive Compliance Agreement (ECA) with the Department of Environmental Quality on July 2, 2003. A revised ECA was signed on August 4, 2004. UVA is currently in compliance with the ECA schedule. Additionally, Section XI of the Title V permit has milestone dates which UVA must meet. Final compliance is expected by October 1, 2008.

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN APPLICABILITY

The CAM plan does not apply to any of the emission units at UVA for the initial Title V permit. Specifically, facilities that did not have their applications determined to be administratively complete by April 20, 1998 are required to comply with CAM for "large" pollutant specific emission units (PSEUs). A "large" PSEU is defined as a unit that has potential post-control emissions greater than a major source threshold on a unit-by-unit and pollutant-by-pollutant basis. UVA's application was deemed complete within the meaning of 9 VAC 5-80-80 and 5-80-90 on July 7, 1998. However, there are no "large" PSEUs that are operated by the facility.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Table I. Significant Emission Units

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Main Heating Plant							
7103-1-01	7103-1	BOILER 1 – Union Iron Works (1951) (Coal)	50 Million BTU/HR	Cyclone Union Iron Works	7103-CY1	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-02R	7103-1	BOILER 2R – IBW (1987) (Coal) BOILER 2R – IBW (1987) (Natural Gas)	95 Million BTU/HR	Baghouse Amerex Custom construction	7103-BH1	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-03	7103-1	BOILER 3 – Union Iron Works (1969) (Coal)	90 Million BTU/HR	Cyclone Union Iron Works	7103-CY2	PM-10 Lead	8/5/94 (Amended 3/9/95)
7103-1-04	7103-1	BOILER 4 – Keeler (1971) (#6 Fuel Oil) BOILER 4 – Keeler (1971) (Natural Gas)	112.5 Million BTU/HR	-	-	-	8/5/94 (Amended 3/9/95)
7103-1-05	7103-1	BOILER 5 – Keeler (1989) (Coal) BOILER 5 – Keeler (1989) (Natural Gas)	112.5 Million BTU/HR	Baghouse Zurn Custom construction	7103-BH2	PM-10 Lead	8/5/94 (Amended 3/9/95)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Coal Handling System							
7103-CH1	7103-CH1	Coal Handling, Unloading, and Storage – coal silos, coal conveying & unloading equipment, enclosures for bunkers	5550 tons	Bin Vent/Dust Filter Dynamic Air Series 343, 1 (one) Model 900 and 4 (four) Model 600	7103-BH3	PM-10	2/14/86
Other Fuel Burning Equipment							
0207-1-01	0207-1	Superior Model #G4RB40A (1956) (#2 Fuel Oil) Superior Model #G4RB40A (1956) (Natural Gas)	1.4 Million BTU/HR	-	-	-	-
0207-1-02	0207-1	Superior Model #G4RB40A (1956) (#2 Fuel Oil) Superior Model #G4RB40A (1956) (Natural Gas)	1.4 Million BTU/HR	-	-	-	-
0580-1-01	0580-1	Columbia Model #WL140 (1990) (#2 Fuel Oil) Columbia Model #WL140 (1990) (Natural Gas)	1.2 Million BTU/HR	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
0580-2-01	0580-2	Cleaver Brooks Model # CB 200-40 (1970) (#2 Fuel Oil) Cleaver Brooks Model # CB 200-40 (1970) (Natural Gas)	1.7 Million BTU/HR	-	-	-	-
0603-1-01	0603-1	Weil-McLain Model # 788 (1991) (#2 Fuel Oil) Weil-McLain Model # 788 (1991) (Natural Gas)	1.6 Million BTU/HR	-	-	-	-
1600-1-01	1600-1	NRC Model #9-47 (1991) (#2 Fuel Oil)	1.1 Million BTU/HR	-	-	-	-
5576-1-01	5576-1	Cleaver Brooks Model #CB 428-300 (1964) (#2 Fuel Oil) Cleaver Brooks Model #CB 428-300 (1964) (Natural Gas)	12.6 Million BTU/HR	-	-	-	-
5576-1-02	5576-1	Cleaver Brooks Model #CB 428-300 (1964) (#2 Fuel Oil) Cleaver Brooks Model #CB 428-300 (1964) (Natural Gas)	12.6 Million BTU/HR	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
5577-1-01	5577-1	MCCUE Kewanee Model #L3W-250-GD2 (1990) (#2 Fuel Oil) MCCUE Kewanee Model #L3W-250-GD2 (1990) (Natural Gas)	10.7 Million BTU/HR	-	-	-	3/29/90 (Amended 11/14/90)
7533-1-01	7533-1	FLO-KNTRL #1 (1973) (Natural Gas) FLO-KNTRL #1 (1973) (#2 Fuel Oil)	15 Million BTU/HR	-	-	-	-
7533-1-02	7533-1	FLO-KNTRL #2 (1973) (Natural Gas) FLO-KNTRL #2 (1973) (#2 Fuel Oil)	15 Million BTU/HR	-	-	-	-
Electrical Generators							
0068-1-01	0068-1	500ROZD4/Gen 5M4027 Emergency generator (2003)(Diesel)	500 kW	-	-	-	-
1142-1-01	1142-1	G.E. (G) 1500 DFMB Emergency generator (Diesel)	500 kW	-	-	-	-
1142-2-01	1142-2	G.E. 8DA Emergency generator (Diesel)	1500 kW	-	-	-	-
1148-1-01	1148-1	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-
1148-2-01	1148-2	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
1148-3-01	1148-3	Caterpillar 3512TA Emergency generator (Diesel)	750 kW	-	-	-	-
1148-4-01	1148-4	Caterpillar A6511-20-24V-A Emergency generator (Diesel)	1100 kW	-	-	-	-
1155-1-01	1155-1	DFLE-4492628 Emergency generator (2002)(Diesel)	1500 kW	-	-	-	-
1196-1-01	1196-1	500DFFB Emergency generator (Diesel)	500 kW	-	-	-	-
3761-1-01	3761-1	WA-9675-0202 Emergency Generator (2001)(Diesel)	1500 kW	-	-	-	-
7103-2-01	7103-2	Caterpillar Model #SR-4 Emergency generator (1986) (Diesel)	1250 kW	-	-	-	11/17/03
7185-1-01	7185-1	1500ROZD4 Emergency Generator (2001)(Diesel)	1500 kW	-	-	-	-
Woodworking Equipment							
0245-1-01	0245-1	Cabinet Shop: Facilities Maintenance – saws, belt sanders and other woodworking and finishing equipment	-	National System Model NSGV 3415 (2001)	0245-BH1	PM-10	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Medical Equipment							
1150-1-04	1150-1	Ethylene Oxide Sterilizer 3M Model 400DGP	100g EtO/ 14 hrs	-	-	-	11/17/03
1150-1-05	1150-1	Ethylene Oxide Sterilizer 3M Model 487AGP	100g EtO/ 14 hrs	-	-	-	11/17/03

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

A copy of the 2002 annual emission update is included in Attachment A. Emissions are summarized in the following tables.

Table II. 2002 Actual Criteria Pollutant Emissions

	Criteria Pollutant Emissions (tons/yr)				
	VOC	CO	SO_2	PM-10	NO_x
Total	1.8	78.0	586.0	40.0	241.0

Table III. 1999 Actual Hazardous Air Pollutant Emissions

Pollutant	Hazardous Air Pollutant Emissions (tons/yr)
Non-VOC/Non-PM HAPs	30.1

EMISSION UNIT APPLICABLE REQUIREMENTS

Main Heating Plant

Limitations

The following limitations are state BACT and NSPS Subpart Db requirements from the minor NSR permit issued on August 5, 1994, including the amendment issued on March 9, 1995. Please note that the condition numbers are from the NSR permit and NSR permit amendment. A copy of each of these documents is enclosed in Attachment B.

Condition I.4:	Fuel throughput limits for boilers 1, 2R, 3, 4 and 5 (Ref. 7103-1-01, 7103-1-2R, 7103-1-03, 7103-1-04 and 7103-1-05), calculated monthly as the sum of each consecutive 12-month period. (3/9/95 Permit Amendment)
Condition I.5:	Emission limits for criteria pollutants from Boiler 1 (Ref. 7103-1-01). (8/5/94 Permit)
Condition I.6:	Emission limits for criteria pollutants from Boiler 2R (Ref. 7103-1-2R). (8/5/94 Permit)
Condition I.7:	Emission limits for criteria pollutants from Boiler 3 (Ref. 7103-1-03). (8/5/94 Permit)
Condition I.5:	Emission limits for criteria pollutants from Boiler 4 (Ref. 7103-1-04). (3/9/95 Permit Amendment)
Condition I.6:	Emission limits for criteria pollutants from Boiler 5 (Ref. 7103-1-05). (3/9/95 Permit Amendment)
Condition I.7:	Particulate emissions from the boilers (Ref. 7103-1-2R and 7103-1-05) shall each be controlled by a baghouse (Ref. 7103-BH1 and 7103-BH2) when firing coal. (3/9/95 Permit Amendment)
Condition I.8:	Changes in boiler fuel type may require a permit to modify and operate. (Ref. 7103-1-01, 7103-1-2R 7103-1-03, 7103-1-04 and 7103-1-05). (3/9/95 Permit Amendment)

Condition I.12:	Sulfur and ash content limitations for coal to be burned in boilers 1, 2R, 3 and 5 (Ref. 7103-1-01, 7103-1-2R 7103-1-03 and 7103-1-05).
Condition I.13:	Sulfur limitation for residual oil to be burned in Boiler 4 (Ref. 7103-1-04).
Condition I.21:	The University of Virginia shall not operate more than three (3) of its coal/natural gas fired boilers (Ref. 7103-1-01, 7103-1-2R 7103-1-03 and 7103-1-05) at any one time.
Condition II.8:	Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
Conditions II.8&9:	The permittee shall take measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions.

The following Virginia Administrative Codes and Federal New Source Performance Standards have specific emission requirements that have been determined to be applicable:

9 VAC 5-50-400 and 9 VAC 5-50-410, Standards of Performance for New and Modified Stationary Sources
9 VAC 5-40-900, Existing Source Standard for Particulate Matter (ACQR 1-6)
9 VAC 5-40-940, Existing Source Standard for Visible Emissions
9 VAC 5-50-80, New Source Standard for Visible Emissions

The following conditions in the Title V permit were established pursuant to these Codes:

Condition III.A.2:	Existing Source Standard for Particulate Matter from the operation of Boiler 1 (Ref. 7103-1-01).
Condition III.A.4:	Existing Source Standard for Particulate Matter from the operation of Boiler 3 (Ref. 7103-1-03).
Condition III.A.7:	NO_X emissions limitation from the operation of Boiler 5 (Ref. 7103-1-05) while simultaneously combusting coal and natural gas.
Condition III.A.9:	Particulate emissions from the boilers (Ref. 7103-1-01 and 7103-1-03) shall each be controlled by a cyclone (Ref. 7103-CY1 and 7103-CY2) when firing coal.

Condition III.A.14: Visible emissions from boilers 1, 3 and 4 (Ref. 7103-1-01, 7103-1-03 and 7103-1-04) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent (60%) opacity.

Condition III.A.15: Visible emissions from Boiler 2R (Ref. 7103-1-2R) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.

Condition III.A.16: Visible emissions from Boiler 5 (Ref. 7103-1-5) shall not exceed twenty percent (20%), except during one six-minute period in any one hour in which visible emissions shall not exceed twenty-seven (27%) percent opacity.

Condition III.A.19: Except where this permit is more restrictive than the applicable requirement, Boiler 2R (Ref. 7103-1-2R) shall be operated in compliance with the requirements of 40 CFR 60, Subpart Db and 40 CFR 60, Subpart A.

Monitoring and Recordkeeping

The monitoring and recordkeeping requirements in Conditions I.10, I.12, I.13 I.16, I.17, I.19, I.20 and II.7 of the minor new source review permit issued August 5, 1994, including the amendment issued on March 9, 1995 have been modified and incorporated into the Title V permit.

Conditions III.A.2, III.A.3, III.A.4, III.A.5 and III.A.6 contains annual criteria pollutant emission limits for the boilers (Ref. 7103-1-01, 7103-1-2R 7103-1-03, 7103-1-04 and 7103-1-05) which are based on coal, natural gas and oil emission factors and throughput limits established in Condition III.A.1. Calculations have been included in Attachment C to demonstrate that if each boiler combusts all that is allowed in the permit, then the permit limits will not be violated. Therefore, as long as the fuel throughput limit is not violated, there is very little chance that annual criteria pollutant emission limits will be violated. Recordkeeping demonstrating compliance with the fuel throughput limits provides reasonable assurance of compliance with the annual criteria pollutant emission limits, satisfying the periodic monitoring requirement. The facility will also be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

Boiler 1 - (Ref. 7103-1-01)

Condition III.A.2 contains short-term criteria pollutant emission limits for Boiler 1 (Ref. 7103-1-01) in pounds per million BTU (MMBTU) and pounds per hour (lbs/hr). Boiler 1 is a coal-fired boiler with no backup fuel. Due to the minimal permitted utilization of Boiler 1 in conjunction with the fact that this boiler is currently not in operation at the Main Heating Plant

(with the exception of emergency use as specified in the Executive Compliance Agreement dated August 4, 2004), initial compliance with the short-term emission limits through performance testing was deemed unnecessary. Compliance with these limitations shall be accomplished as follows:

Particulate Matter

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler and control equipment as well as monitoring and recordkeeping. The permit requires the operation of a Union Iron Works cyclone. Condition III.B.3 requires that the cyclone be inspected annually to by UVA to ensure structural integrity. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment.

Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the ash content of the coal to ensure compliance with the coal ash content limit of 6.8% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 1 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of all of the aforementioned requirements provides reasonable assurance that the short-term particulate matter emission limits will not be violated.

Sulfur Dioxide

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the coal to ensure compliance with the coal sulfur content limit of 1.12% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 1 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term sulfur dioxide emission limits will not be violated.

Nitrogen Oxides, Carbon Monoxide and VOC

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 1 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term nitrogen oxides, carbon monoxide and volatile organic compound emission limits will not be violated.

Boiler 2R - (Ref. 7103-1-2R)

Condition III.A.3 contains short-term criteria pollutant emission limits for Boiler 2R (Ref. 7103-1-2R) in pounds per million BTU (MMBTU) and pounds per hour (lbs/hr). Boiler 2R is a coal and natural gas-fired boiler. Compliance with these limitations shall be accomplished as follows:

Particulate Matter

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 5 or 17 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler and control equipment as well as monitoring and recordkeeping.

The permit requires the operation of an Amerex Custom Construction baghouse. Condition

III.B.1 requires that the baghouse be equipped with a device to continuously measure the differential pressure drop across the baghouse. It also requires that the monitoring device be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Condition III.B.2. requires the permittee to conduct a weekly inspection of each baghouse, including an observation of the pressure drop across the baghouse. If during the inspection, the pressure drop is not within the manufacturer's recommended range, timely corrective action shall be taken such that the baghouse resumes proper operation. The operation, inspection and maintenance of the monitoring device will in part ensure that the baghouse is operating properly so that the particulate matter emission standards are met.

Additionally, Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. The facility is required to keep records of boiler operator training in Condition III.B.15. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the ash content of the coal to ensure compliance with the coal ash content limit of 6.8% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 2R combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of all of the aforementioned requirements provides reasonable assurance that the short-term particulate matter emission limits will not be violated.

Sulfur Dioxide

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 6 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the coal to ensure compliance with the coal sulfur content limit of 1.12% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 2R combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term sulfur dioxide emission limits will not be violated.

Nitrogen Oxides, Carbon Monoxide and VOC

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Boiler 2R NO_X emissions are also measured using a continuous emissions monitor (CEM). This monitor is maintained and calibrated in accordance with procedures outlined in 40 CFR 60.13 and 40 CFR 60.48b to help ensure accurate measurements.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 2R combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term nitrogen oxides, carbon monoxide and volatile organic compound emission limits will not be violated.

Boiler 3 - (Ref. 7103-1-03)

Condition III.A.4 contains short-term criteria pollutant emission limits for Boiler 3 (Ref. 7103-1-03) in pounds per million BTU (MMBTU) and pounds per hour (lbs/hr). Boiler 3 is a coal-fired boiler with no backup fuel. Compliance with these limitations shall be accomplished as follows:

Particulate Matter

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 5 or 17 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler and control equipment as well as monitoring and recordkeeping. The permit requires the operation of a Union Iron Works cyclone. Condition III.B.3 requires that the cyclone be inspected annually to by UVA to ensure structural integrity. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment.

Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the ash content of the coal to ensure compliance with the coal ash content limit of 6.8% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 3 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of all of the aforementioned requirements provides reasonable assurance that the short-term particulate matter emission limits will not be violated.

Sulfur Dioxide

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 6 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the coal to ensure compliance with the coal sulfur content limit of 1.12% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 3 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term sulfur dioxide emission limits will not be violated.

Nitrogen Oxides, Carbon Monoxide and VOC

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 3 combusts the maximum amount of coal possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term nitrogen oxides, carbon monoxide and volatile organic compound emission limits will not be violated.

Boiler 4 - (Ref. 7103-1-04)

Condition III.A.5 contains short-term criteria pollutant emission limits for Boiler 4 (Ref. 7103-1-04) in pounds per million BTU (MMBTU) and pounds per hour (lbs/hr). Boiler 4 is a residual oil-fired boiler with natural gas as the backup fuel. Compliance with these limitations shall be accomplished as follows:

Particulate Matter, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide and VOC

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping.

Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. The facility is required to keep records of boiler operator training in Condition III.B.15.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 4 combusts the maximum amount of fuel oil or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions. Condition III.B.14 also requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the fuel oil to ensure compliance with the sulfur content limit of 2.0% in Condition III.A.12.

The combination of all of the aforementioned requirements provides reasonable assurance that the short-term criteria pollutant emission limits will not be violated.

Boiler 5 - (Ref. 7103-1-05)

Conditions III.A.6 and III.A.7 contain short-term criteria pollutant emission limits for Boiler 5 (Ref. 7103-1-05) in pounds per million BTU (MMBTU) and pounds per hour (lbs/hr). Boiler 2R is a coal and natural gas-fired boiler. Compliance with these limitations shall be accomplished as follows:

Particulate Matter

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 5 or 17 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler and control equipment as well as monitoring and recordkeeping.

The permit requires the operation of an Amerex Custom Construction baghouse. Condition III.B.1 requires that the baghouse be equipped with a device to continuously measure the differential pressure drop across the baghouse. It also requires that the monitoring device be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Condition III.B.2. requires the permittee to conduct a weekly inspection of each baghouse, including an observation of the pressure drop across the baghouse. If during the inspection, the pressure drop is not within the manufacturer's recommended range, timely corrective action shall be taken such that the baghouse resumes proper operation. The operation, inspection and maintenance of the monitoring device will in part ensure that the baghouse is operating properly so that the particulate matter emission standards are met.

Additionally, Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. The facility is required to keep records of boiler operator training in Condition III.B.15. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the ash content of the coal to ensure compliance with the coal ash content limit of 6.8% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 5 combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of all of the aforementioned requirements provides reasonable assurance that the short-term particulate matter emission limits will not be violated.

Sulfur Dioxide

Initial compliance with the short-term emission limits shall be accomplished through a once per permit term performance test. Condition III.C.2 requires the permittee to conduct a stack test in accordance with EPA Method 6 (40 CFR Part 60, Appendix A) within 180 days of issuance of the issuance of the Title V permit.

Continuing compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Condition III.B.14 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the coal to ensure compliance with the coal sulfur content limit of 1.12% in Condition III.A.11.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 5 combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term sulfur dioxide emission limits will not be violated.

Nitrogen Oxides, Carbon Monoxide and VOC

Compliance with the short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping. Condition III.A.17 requires that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Furthermore, Condition III.A.18 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. The facility is required to keep records of boiler operator training in Condition III.B.15.

Boiler 5 is subject to the NOx emissions standards in 40 CFR 60 Subpart Db which are included in Conditions III.A.6 and III.A.7. All of the monitoring, recordkeeping and reporting requirements of NSPS Subpart Db are included in the Title V permit. NO_X emissions are measured using a continuous emissions monitor (CEM) as required by 40 CFR 60 Subpart Db. This monitor is maintained and calibrated in accordance with procedures outlined in 40 CFR 60.13 and 40 CFR 60.48b to help ensure accurate measurements.

Additionally, calculations have been included in Attachment C to demonstrate that if Boiler 5 combusts the maximum amount of coal or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

The combination of these requirements provides reasonable assurance that the short-term nitrogen oxides, carbon monoxide and volatile organic compound emission limits will not be violated.

There are several opacity standards that apply to the boilers located at the Main Heating Plant. Compliance with the opacity standards shall be accomplished through the use of continuous opacity monitor (COMS) on the Main Heating Plant stack in addition to recordkeeping and reporting requirements.

The facility is required to keep a notice posted in the Main Heating Plant control room providing instructions to operators to contact the DEQ whenever opacity exceeds 20% or more for more than one hour even if occurring during startup, shutdown, or malfunction. Furthermore, the notice requires that the DEQ be contacted any time opacity exceeds 60% for a six-minute average when any combination of boilers 1, 3 and 4 (Ref. 7103-1-01, 7103-1-03 and 7103-1-04) are operating by themselves, or any time opacity exceeds 27% when Boiler 5 (Ref. 7103-05) is operating by itself or in conjunction with any other boiler, or any time opacity exceeds 30% when Boiler 2R (Ref. 7103-2R) is operating by itself or in conjunction with any combination of boilers 1, 3 and 4. Startup and shutdown exemptions are only allowable during periods that boilers 2R and 5 are operating without boilers 1, 3 and 4. To facilitate the reporting requirements, the facility will track the specific boilers operating at any point in time and indicate this information

in any required reports indicating status of emissions. Shift operators shall check the COMS and the logbook at the beginning of each shift to ensure that proper notifications have been made to DEQ, if necessary. The facility is also required to train all boiler operators to follow this procedure. Proper operation of the COMS shall be ensured by following the COMS maintenance and calibration requirements outlined in 40 CFR 60.13 and 40 CFR 60 Subpart Db. The facility is required to keep records of COMS calibrations and calibration checks, percent operating time, and excess emissions as outlined in Condition III.B.15.

Condition III.A.13 states that UVA shall not operate more than three (3) of its coal/natural gas fired boilers (Ref. 7103-1-01, 7103-1-2R 7103-1-03 and 7103-1-05) at any one time. As previously stated, the facility will track and log the specific boilers operating at any point in time in order to ensure compliance with this applicable requirement.

Testing

The facility is required to construct the facility so as to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.

The permit requires UVA to conduct performance tests for particulate matter (PM) in accordance with EPA Method 5 or 17 (40 CFR Part 60, Appendix A) and sulfur dioxide in accordance with EPA Method 6, 6a or 6c (40 CFR Part 60, Appendix A) to demonstrate compliance with the emission limits contained in Conditions III.A.3, III.A.4 and III.A.6. The tests shall be performed within 180 days of the issuance of this permit and shall be conducted on a once per permit term frequency.

Condition III.C.3 requires that UVA maintain records (supplier fuel analysis) of all coal shipments purchased. The sulfur content shall be determined according to ASTM D4239-93 "Standard Test Method for Sulfur in the Analytical Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion Methods" or a Department of Environmental Quality approved equivalent method. The ash content shall be determined according to ASTM D3174-89 "Standard Test Method for Ash in the Analytical Sample of Coal and Coke from Coal" or a Department of Environmental Quality approved equivalent method. The coal testing will help ensure compliance with the emissions standards for the coal boilers.

Additionally, a table of test methods has been included in the permit if further testing is required. The DEQ and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

Condition III.D.1 requires UVA to furnish notification to DEQ of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown.

Condition III.D.2 requires UVA to furnish notification to the DEQ of malfunctions with process or related air pollution control equipment that may cause excess emissions for more than one hour as soon as practicable but not later than four daytime business hours after the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, DEQ shall again be notified.

Condition III.D.3 requires UVA to submit quarterly Excess Emissions Reports for any excess emissions which occur during the reporting period. Reports shall follow the format provided in 40 CFR 60.49b(g). A copy of the report shall be submitted to DEQ and EPA.

Streamlined Requirements

9 VAC 5-40-900, Existing Source Standard for Particulate Matter (ACQR 1-6)
9 VAC 5-40-930, Existing Source Standard for Sulfur Dioxide (ACQR 1-6)
Particulate Matter Emission Limits, Condition I.5 of 8/5/94 permit as Amended 3/9/95
Particulate Matter Emission Limits, Condition I.7 of 8/5/94 permit as Amended 3/9/95

The existing source standard for sulfur dioxide from the Main Heating Plant stack has been streamlined. The total permitted emission limit for this stack is much less than that required by 9 VAC 5-40-930. Attachment C provides calculations supporting the streamlining of the existing source standard.

Similarly, the existing source standard for particulate matter from each of the boilers located at the Main Heating Plant has been streamlined with the exception of Boiler 1 and Boiler 3. The particulate matter emission limits for Boiler 1 and Boiler 3 have been adjusted to reflect the allowable emission rates under 9 VAC 5-40-900. All other permitted emission limits for each of the remaining boilers are at least as stringent as that required by 9 VAC 5-40-900. Attachment C provides a detailed summary of existing source standard requirements.

Coal Handling

Limitations

The following limitations are state BACT requirements from the minor NSR permit issued on February 14, 1986. Please note that the condition numbers are from the NSR permit. A copy of the permit is enclosed in Attachment B.

Condition I.4:	The annual throughput of coal at the facility (Ref. 7103-CH1) shall not exceed 27,700 tons, calculated monthly as the sum of each consecutive 12-month period.
Condition I.5:	The annual throughput of coal at the truck station (Ref. 7103-CH1) shall not exceed 1,500 tons, calculated monthly as the sum of each consecutive 12-month period.

Condition I.6:	Particulate matter emission limits from the operation of the four coal storage silos (Ref. 7103-CH1).
Condition I.7:	Particulate matter emission limits from the coal loading to trucks (Ref. 7103-CH1).
Condition I.8:	Particulate matter emission limits from the operation of the coal unloading building (Ref.7103-CH1).
Condition I.9:	Particulate matter emission limits from coal unloading by truck (Ref. 7103-CH1).
Condition I.10:	Particulate emissions from each of the four coal silos (Ref. 7103-CH1) and four bunkers (Ref. 7103-CH1) will be controlled by cartridge filters (Ref. 7103-BH3).
Condition I.11:	Particulate emissions from the unloading of coal silos to trucks will be controlled by the use of flexible chute extensions to load trucks.
Condition I.12:	Particulate emissions from coal unloading of railcars (Ref. 7103-CH1) will be controlled by enclosing the area with an open and metal building.
Condition I.14:	All coal bunkers (Ref. 7103-CH1) and the coal conveying system (Ref. 7103-CH1) shall be completely enclosed.
Condition I.16:	Visible emissions from the truck station (Ref.7103-CH1) shall not exceed ten percent (10%) opacity.
Condition I.17:	The coal unloading by truck shall be discontinued except during emergencies. Emergency truck unloading will only take place when the normal rail unloading is not operational.
Condition I.19:	Coal shall be washed, double-screened and treated.
Conditions II.6&II.7:	Measures necessary in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80, New Source Standard for Visible Emissions

9 VAC 5-50-80 was determined to be applicable to the coal handling emission units because documentation of construction dates for these units were unavailable.

The following condition in the Title V permit was established pursuant to this Code:

Condition IV.A.12: Visible emissions from each cartridge filter (Ref. 7103-BH3) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity. This condition applies at all times except during startup, shutdown, and malfunction.

The following conditions were established pursuant to 9 VAC 5-80-110 in order to provide assurance that the aforementioned emission standards for the coal handling activities are met. Condition numbers refer to those contained in the Title V permit.

Condition IV.A.13: Visible fugitive emissions from coal handling equipment operations (Ref. 7103-CH1) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity. This condition applies at all times except during startup, shutdown, and malfunction.

Condition IV.A.14: Requirements for controlling fugitive dust emissions from the coal handling equipment.

Monitoring and Recordkeeping

Condition IV.A.7 of the permit requires particulate matter emissions from each of the four coal silos (Ref. 7103-CH1) and four bunkers (Ref. 7103-CH1) to be controlled by cartridge filters. To ensure proper operation of each cartridge filter, Condition IV.B.1 requires each unit to be equipped with a device to continuously measure the differential pressure drop across the cartridge filter. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device is required to be in operation when the cartridge filter is operating. Furthermore, Condition IV.B.2 requires UVA to conduct a weekly inspection of each cartridge filter, including an observation of the pressure drop across the cartridge filter. If during the inspection, the pressure drop is not within the manufacturer's recommended range, timely corrective action shall be taken such that the cartridge filter resumes proper operation. The weekly inspections will reveal potential problems with the cartridge filter, thereby allowing the problems to be fixed in a timely manner. A properly operating cartridge filter will help ensure that the particulate matter emission limits and visible emission limits established for these units are met.

Additional periodic monitoring required to reasonably assure compliance with the visible emission limitations in Condition IV.A.11 for the truck station exhaust and Condition IV.A.12

for each cartridge filter exhaust consists of a weekly inspection to determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is taken within two hours of the visible emission inspection such that the equipment operates with no visible emissions within 24 hours of the initial observation. All visible emissions inspections must be performed when the equipment is operating at the maximum rate of operation for the day. The facility shall record all inspection results and visible emission evaluations.

The permit contains a requirement for UVA to perform weekly inspection and maintenance activities for all coal handling equipment operations. The activities will include inspecting and maintaining the water spray systems or equivalent used to control fugitive emissions from the coal handling activities and a visual survey of the coal handling activities for any sources of excessive fugitive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that leave the plant site boundaries. If sources of excess fugitive emissions are identified during the survey, the permittee shall use water or a suitable chemical treatment to minimize the fugitive emissions. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water run-off. These requirements reasonably assure compliance with the coal handling equipment opacity limit in Condition IV.A.13.

In addition to the wet suppression requirements to control fugitive emissions, several additional control measures are required by the February 14, 1986 permit:

Condition I.11:	Particulate emissions from the unloading of coal silos to trucks will be controlled by the use of flexible chute extensions to load trucks.
Condition I.12:	Particulate emissions from coal unloading of railcars (Ref. 7103-CH1) will be controlled by enclosing the area with an open and metal building.
Condition I.14:	All coal bunkers (Ref. 7103-CH1-B1 through B4) and the coal conveying system (Ref. 7103-CH1) shall be completely enclosed.

These requirements have been included in the Title V permit. The facility has been inspected and all of these control measures have been constructed properly. Therefore, no additional monitoring is necessary aside from the general requirement to visually inspect coal handling operations for the presence of visible emissions.

Conditions IV.A.1 and IV.A.2 contain coal throughput limits while Conditions IV.A.3 through IV.A.6 contain various emission limits for coal handling operations. In order to help demonstrate compliance with these limitations, the permit requires the facility to maintain the following records:

- The pollutant-specific emission factors and equations used to demonstrate compliance with Conditions IV.A.3 through IV.A.6;

- Annual throughput of coal at the facility (Ref. 7103-CH1), calculated monthly as the sum of each consecutive 12-month period;

- Annual throughput of coal at the truck station (Ref.7103-CH1), calculated monthly as the sum of each consecutive 12-month period;

- A monthly log of coal received by rail or truck, and a monthly log of coal loaded onto trucks for transport;

- A log of weekly cartridge filter inspection results and visible emissions inspection results;

- Records of the required training and certification for operators of the air pollution control equipment. Certification of training shall consist of a statement of time, place, and nature of training provided;

- Results of all performance tests and visible emissions evaluations.

Testing

A table of test methods has been included in the permit if testing, in addition to the testing and monitoring specified in this permit, is performed pursuant to a request from DEQ. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

Condition IV.D.1 requires UVA to furnish notification to DEQ of the intention to unload coal by truck at least 24 hours prior to the unloading event. This is required to demonstrate compliance with Condition IV.A.15 which states that coal unloading by truck shall be discontinued except during emergencies.

UVA is also required to notify DEQ of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification includes the estimated length of shutdown and the measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

Lastly, the facility must notify DEQ of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour. Once the condition causing the failure or malfunction has been corrected and the equipment is again in operation, UVA shall notify DEQ.

No other specific reporting has been included in the permit for the coal handling operations.

Streamlined Requirements

9 VAC 5-50-80 (New Source Standard for Visible Emissions) have been streamlined for the truck station (Ref. 7103-CH1). The permitted opacity limit of 10 percent (10%) is more stringent than this standard.

9 VAC 5-40-900 (Existing Source Standard for Particulate Matter (ACQR 1-6)) has been streamlined because the permitted allowable emissions for coal handling operations are more stringent. Specifically, the process weight limit for particulate matter emissions from the coal handling equipment operations shall not exceed the pound per hour limit as determined by the following equation:

$$E = 55.0P^{0.11}-40$$

Where:

E = emission rate in lbs/hr
P = process weight rate in tons/hr

The rated capacity of the coal handling equipment is 5550 tons. Furthermore, the coal-fired boilers can process up to 13.06 tons per hour. Table IV provides estimated particulate emissions from the coal handling equipment using both the rated capacity of the equipment and the maximum hourly coal throughput from the boilers. In both cases, the permitted emissions in Conditions IV.A.3 through IV.A.6 are more stringent. The permitted emissions for coal handling equipment are 2.6 pounds per hour.

Table IV. Process Weight Rule Particulate Emissions Limit from Coal Handling Equipment

Emission Unit	Pollutant	Limitation (lbs/hr)
Coal Handling Equipment (5550 tons)	PM/PM-10	101.98
Coal Handling Equipment (13.06 tons per hour)		32.97

There are no other streamlined requirements for the coal handling operations. It is important to note that there are only four coal silos at the facility instead of the seven that were originally permitted on February 14, 1986. Therefore, the Title V permit has been modified to reflect the proper number of silos. The NSR permit will also be amended to reflect this operational status.

Other Fuel Burning Equipment

Limitations

The following limitations are state BACT and NSPS Subpart Dc requirements from the minor NSR permit issued on March 29, 1990 as amended November 14, 1990. Please note that the condition numbers are from the NSR permit. A copy of the permit is enclosed in Attachment B.

Condition 4:	The 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall consume no more than 10,460 standard cubic feet per hour and no more than 30 million standard cubic feet per year of natural gas.
Condition 5:	The 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall consume no more than 74.5 gallons per hour and 21,600 gallons per year of distillate oil.
Condition 6:	Emission limits for criteria pollutants from the operation of the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) when firing natural gas.
Condition 7:	Emission limits for criteria pollutants from the operation of the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) when firing distillate oil.
Condition 8:	Visible emissions from the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) shall not exceed ten percent (10%) opacity
Condition 10:	The approved fuels for the 10.73 MMBtu/hr boiler (Ref. 5577-1-01) are natural gas and distillate oil. A change in fuels may require a permit to modify and operate.
Condition 11:	Specifications for distillate oil to be burned in the 10.73 MMBtu/hr boiler (Ref. 5577-1-01).

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-40-900, Existing Source Standard for Particulate Matter (ACQR 1-6)
9 VAC 5-40-930, Existing Source Standard for Sulfur Dioxide (ACQR 1-6)
9 VAC 5-40-940, Existing Source Standard for Visible Emissions
9 VAC 5-50-80, New Source Standard for Visible Emissions

The following conditions in the Title V permit were established pursuant to these Codes:

Condition V.A.5:	Existing Source Standards for Particulate Matter and Sulfur Dioxide for fuel burning equipment.

Condition V.A.7:	Visible emissions from fuel burning equipment constructed after March 17, 1972 shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.
Condition V.A.8:	Visible emissions from fuel burning equipment constructed prior to March 17, 1972 shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent (60%) opacity.

The following conditions were established pursuant to 9 VAC 5-80-110 in order to provide assurance that the aforementioned emission standards for the fuel burning equipment are met. Condition numbers refer to those contained in the Title V permit.

Condition V.A.10&11:	Approved fuel usage for boilers.
Condition V.A.13:	Specifications for distillate oil to be burned in fuel burning equipment.
Condition V.A.14:	Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.
Condition V.A.15:	The permittee shall take measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affect such emissions.

Monitoring and Recordkeeping

The monitoring and recordkeeping requirements in Conditions 11 and 12 of the March 29, 1990 minor NSR permit as amended November 14, 1994 have been modified and incorporated into the Title V permit in order to meet Part 70 requirements.

Conditions V.A.3 and V.A.4 contain annual criteria pollutant emission limits for the 10.73 MMBTU/hr boiler (Ref. 5577-1-01) when firing natural gas and distillate oil, respectively. These limits are based on natural gas and oil emission factors and throughput limits 30 million standard cubic feet of natural gas per year and 21,600 gallons of distillate oil per year established in Condition III.A.1. Calculations have been included in Attachment C to demonstrate that if this boiler combusts all that is allowed in the permit, then the permit limits will not be violated. Therefore, as long as the fuel throughput limits are not violated, there is very little chance that the criteria pollutant emission limits will be violated. Recordkeeping demonstrating compliance

with the fuel throughput limits provides reasonable assurance of compliance with the annual criteria pollutant emission limits, satisfying the periodic monitoring requirement. The facility will also be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

Conditions V.A.3 through V.A.5 contain short term emission limits for several boilers. Compliance with these short-term emission limits shall be accomplished through proper operation of the boiler as well as monitoring and recordkeeping.

Condition V.A.14 states that all boilers shall be controlled by proper operation and maintenance and that all boiler operators be trained to operate the boilers properly and in accordance with manufacturer's recommendations. Additionally, Condition V.A.15 requires the permittee to take measures to minimize the duration and frequency of excess emissions with respect to air pollution control equipment, monitoring devices and process equipment. A properly operating boiler will help ensure that the emission limits contained in Conditions V.A.3 and V.A.5 are met.

Additionally, calculations have been included in Attachment C to demonstrate that if each boiler combusts the maximum amount of fuel oil or natural gas possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

ConditionV.B.2 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the fuel oil burned in each boiler to ensure compliance with the sulfur content limits established in Conditions V.A.12 and V.A.13. Furthermore, Conditions V.A.9 through V.A.11 list the approved fuels for each boiler. These limitations provide additional assurance of compliance with the emission limits in Conditions V.A.3 through V.A.5.

Periodic monitoring necessary to ensure compliance with the visible emissions limits established in Conditions V.A.6 through V.A.8 consists of a weekly inspection of the each boiler stack to determine the presence of visible emissions. If during the inspection, visible emissions are observed, an EPA Method 9 (40 CFR Part 60, Appendix A) visible emissions evaluation (VEE) shall be conducted. The VEE shall be conducted for a minimum period of six (6) minutes. If any of the observations exceed the 20% opacity limit, the observation period shall continue until sixty (60) minutes of observations have been completed. The facility shall record all inspection results.

Actual criteria pollutant emissions from the boilers when burning oil or natural gas will be calculated using the following equations.

a. For fuel oil combustion:

$$E = F \times O$$

Where:

E = Emission rate (lb/time period)
F = Pollutant specific emission factors as follows:

		#1 / #2 Fuel Oil
TSP	=	2.0 lb/1000 gal
PM-10	=	1.0 lb/1000 gal
SO_2	=	142S lb/1000 gal [(1)]
CO	=	5.0 lb/1000 gal
NO_x	=	20.0 lb/1000 gal

[(1)] S = weight percent sulfur

O = fuel oil consumed (1000 gal/time period)

b. For natural gas combustion:

$E = F \times N$

Where:

E = Emission Rate (lb/time period)
F = Pollutant specific emission factors as follows:

TSP	=	7.6 lb/million ft^3
PM-10	=	7.6 lb/million ft^3
SO_2	=	0.6 lb/million ft^3
NO_x	=	100.0 lb/million ft^3
CO	=	84.0 lb/million ft^3

N = Natural gas consumed (million ft^3/time period)

Conditions V.A14 and V.A.15 require that emissions from each boiler and be controlled by proper operation and maintenance and that boiler operators be trained in the proper operation of the equipment. The requirement in Condition V.B.3 to maintain boiler operator training records and good operating instructions for the boilers provides reasonable assurance that the boilers will be operated and maintained properly by the facility. This satisfies the periodic monitoring requirement.

Testing

Condition 9 of the March 29, 1990 permit is incorporated. Specifically, the facility is required to construct the facility so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

A table of test methods has been included in the permit if testing is performed. The

Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the fuel burning equipment in this section.

Streamlined Requirements

9 VAC 5-50-80 (New Source Standard for Visible Emissions)
9 VAC 5-40-900, Existing Source Standard for Particulate Matter (ACQR 1-6)
9 VAC 5-40-930, Existing Source Standard for Sulfur Dioxide (ACQR 1-6)

9 VAC 5-50-80 has been streamlined for 10.73 MMBtu/hr boiler (Ref. 5577-1-01). Additionally, 9 VAC 5-40-900 and 9 VAC 5-40-930 have been streamlined for this boiler because the permitted limits for this boiler are more stringent than these standards. Attachment C provides calculations supporting the streamlining of the existing source standards for particulate matter and sulfur dioxide.

Electrical Generators

Limitations

The following limitations are state BACT requirements from the minor NSR permit issued on November 17, 2003. Please note that the condition numbers are from the NSR permit. A copy of the permit is enclosed in Attachment B.

Condition 4:	The approved fuel for the 1250-kilowatt generator (Ref. 7103-2-01) is distillate oil. A change in fuels may require a permit to modify and operate.
Condition 5:	The 1250-kilowatt generator (Ref. 7103-2-01) is to be used only for providing power at the location during interruption of service from the normal power supplier, periodic maintenance testing, and operational training. Total usage for the emergency generator may not exceed 500 hours per year.
Condition 6:	The 1250-kilowatt generator (Ref. 7103-2-01) shall consume no more than 53,261 gallons per year of distillate oil.
Condition 7:	Specifications for distillate oil to be burned in the 1250-kilowatt generator (Ref. 7103-2-01).
Condition 9:	The 1250-kilowatt generator (Ref. 7103-2-01) emissions shall be

controlled by proper operation and maintenance. Generator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.

Condition 10: Criteria pollutant emission limits from the operation of the 1250-kilowatt generator (Ref. 7103-2-01).

Condition 11: Visible emissions from the operation of the 1250-kilowatt generator (Ref. 7103-2-01) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%).

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80, New Source Standard for Visible Emissions

The following condition in the Title V permit was established pursuant to these Codes:

Condition VI.A.3: Visible emissions from emergency generators shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.

The following conditions were established pursuant to 9 VAC 5-80-110 in order to provide assurance that the aforementioned standard for the generator is met. Condition numbers refer to those contained in the Title V permit.

Condition V.A.4: Approved fuel usage for the generators.

Condition V.A.5: Specifications for distillate oil to be burned in the generators.

Condition V.A.6: Generator emissions shall be controlled by proper operation and maintenance. Generator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.

Condition V.A.7: Each generator is to be used only for providing power at the location during interruption of service from the normal power supplier, periodic maintenance testing, and operational training. Total usage for each emergency generator may not exceed 500 hours per year.

Monitoring and Recordkeeping

The monitoring and recordkeeping requirements in Conditions 8, 9 and 12 of the November 17, 2003 minor NSR permit have been modified and incorporated into the Title V permit in order to meet Part 70 requirements.

Condition V.A.2 contains annual criteria pollutant emission limits for the 1250-kilowatt generator (Ref. 7103-2-01). These limits are based on distillate oil emission factors and a throughput limit of 53,261 gallons per year established in Condition VI.A.1. Calculations have been included in Attachment C to demonstrate that if this generator combusts all that is allowed in the permit, then the permit limits will not be violated. Therefore, as long as the fuel throughput limits are not violated, there is very little chance that the criteria pollutant emission limits will be violated. Recordkeeping demonstrating compliance with the fuel throughput limits provides reasonable assurance of compliance with the annual criteria pollutant emission limits, satisfying the periodic monitoring requirement. The facility will also be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

Conditions VI.A.2 also contains short term emission limits for the 1250-kilowatt generator (Ref. 7103-2-01). Calculations have been included in Attachment C to demonstrate this generator combusts the maximum amount of fuel oil possible on an hourly basis, then the permit limits will not be violated. The facility will be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions. Furthermore, compliance with these short-term emission limits shall be accomplished through proper operation of the generator as well as monitoring and recordkeeping.

Condition VI.A.6 states that all generators shall be controlled by proper operation and maintenance. Generator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum. A properly operating generator and properly trained operators will help ensure that the emission limits contained in Conditions V.A.2 and the opacity standards in Condition VI.A3 are met. It is important to note that historically there have been no opacity violations associated with the operation of any of the emergency generators. Therefore, proper operation, maintenance and training satisfies the periodic monitoring requirements for the opacity standard.

ConditionVI.B.1 requires the permittee to obtain fuel supplier certifications that specify the sulfur content of the fuel oil burned in each generator. Condition VI.A.4 lists the approved fuel for each generator. These limitations provide additional assurance of compliance with the emission limits and opacity limits in Conditions VI.A.2 and VI.A.3.

Testing

Condition 3 of the November 17, 2003 permit is incorporated. Specifically, the facility is required to construct the facility so as to allow for emissions testing at any time using appropriate

methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the electrical generators.

Streamlined Requirements

9 VAC 5-40-80 (Existing Source Standard for Visible Emissions)

9 VAC 5-40-80 has been streamlined for the electrical generators because all of the installation dates were not available. Therefore, it was assumed that all generators were installed after March 17, 1972.

Woodworking Equipment

Limitations

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80, New Source Standard for Visible Emissions
9 VAC 5-40-2270, Emission Standards for Woodworking Operations

The following condition in the Title V permit was established pursuant to these Codes:

Condition VII.A.2:	Visible emissions from the Cabinet Shop (Ref. 0245-1-01) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.
Condition VII.A.3:	Particulate matter emissions from the woodworking equipment exhaust shall not exceed 0.05 grains per standard cubic feet of exhaust gas

The following condition was established pursuant to 9 VAC 5-80-110 in order to provide assurance that the aforementioned standards for the woodworking equipment are met. Condition numbers refer to those contained in the Title V permit.

Condition VII.A.1: Particulate matter emissions from the Cabinet Shop (Ref. 0245-1-01) shall be controlled by a fabric filter.

The facility is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements for incidental wood furniture manufacturing in 40 CFR Part 63, Subpart JJ and 9 VAC 5-60-100 provided that the following conditions are met:.

- The production of cabinets, shelves, and counter tops is wood furniture manufacturing, the facility is a major source due to activities unrelated to the wood furniture manufacturing; and

- The facility use of wood furniture coating and adhesives are less than 100 gallons per month.

The facility meets both of these requirements. An enforceable limitation on wood furniture coating and adhesive usage has been included in the permit (Condition VII.A.4).

Monitoring and Recordkeeping

The permit requires operation of fabric filter to demonstrate compliance with the particulate matter and visible emission requirements. A properly operating fabric filter can achieve compliance with the 0.05 gr/scf particulate limit and the opacity limit in Condition VII.A.2.

The permittee will inspect the fabric filter on a weekly basis. The inspection will include a determination of the presence of visible emissions, and an observation of the pressure drop across the filter. Corrective action will be taken if visible emissions are present. A log recording the results of the inspection including pressure drop, presence of visible emissions, and any maintenance or corrective action taken, shall be kept.

The permit also includes a requirement to monitor and record the monthly amount of wood furniture coating and adhesive usage to demonstrate compliance with the monthly limitation.

Testing

No specific testing has been included in the permit for the woodworking equipment.

A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the woodworking equipment.

Streamlined Requirements

9 VAC 5-40-80 and 9 VAC 5-40-2280 (Existing Source Standard for Visible Emissions)

9 VAC 5-40-80 9 VAC 5-40-2280 have been streamlined for the woodworking equipment because installation dates were not available. Therefore, it was assumed that all woodworking equipment was installed after March 17, 1972.

Medical Equipment

Limitations

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80, New Source Standard for Visible Emissions

The following condition in the Title V permit was established pursuant to these Codes:

Condition VIII.A.1:	Visible emissions from each ethylene oxidizer (Ref. 1150-1-04 and 1150-1-05) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity.

The following condition was established pursuant to 9 VAC 5-80-110 in order to provide assurance that the aforementioned standards for the woodworking equipment are met. Condition numbers refer to those contained in the Title V permit.

Condition VIII.A.2:	Ethylene oxidizer (Ref. 1150-1-04 and 1150-1-05) emissions shall be controlled by proper operation and maintenance. Ethylene oxidizer operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions, at minimum.

Monitoring and Recordkeeping

The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to, records of the required ethylene oxidizer operator training including a statement of time, place and nature of training provided.

A properly operating ethylene oxide sterilizer will not result in any visible emissions. Historically, there have been no visible emissions from these units. They are operated within the hospital on carts. Therefore, no visible emissions evaluations are necessary. The DEQ reserves the right to request an evaluation of visible emissions in the future if warranted. Records indicating that the ethylene oxide sterilizer operators have been trained will help ensure that the units are operated properly and in accordance with manufacturer’s operating instructions.

Testing

No specific testing has been included in the permit for the medical equipment.

A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

No specific reporting has been included in the permit for the medical equipment.

Streamlined Requirements

There are no streamlined requirements for the medical equipment.

Hazardous Air Pollutants

Limitations

The following "place holder" conditions have been established pursuant to requirements contained in 40 CFR Part 63 Subpart DDDDD:

Condition IX.A:	Except where this permit is more restrictive, existing boilers and process heaters (not including space heaters) shall comply with 40 CFR Part 63 Subpart DDDDD (Industrial/ Commercial/ Institutional Boilers and Process Heater NESHAP) no later than three years after the date of final rule publication in the Federal Register. New industrial boilers and process heaters must comply with the final rule when they are brought on line. New units have up to six months after the rule is final, or six months after startup, whichever is later, to demonstrate compliance with 40 CFR Part 63 Subpart DDDDD.

Monitoring and Recordkeeping

Condition IX.B requires that the permittee record and retain all information necessary to determine compliance with 40 CFR Part 63 Subpart DDDDD. This generic requirement provides reasonable assurance that the future applicable standards will be met. Specific requirements will be incorporated in the Title V permit prior to the applicable compliance dates.

Testing

No specific testing has been included in the permit for hazardous air pollutants.

Reporting

All notifications required by 40 CFR 63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) and 40 CFR Part 63 Subpart DDDDD shall be provided by the dates specified, unless the permittee obtains federally enforceable limits on its facility-wide emissions of HAPs to below major-source thresholds prior to the notification dates specified. Notifications shall be submitted to the Director, Valley Region. A copy of each notification shall be provided to EPA Region III, to the attention of the Industrial/Commercial/Institutional Boilers and Process Heater NESHAP Coordinator. No other specific reporting has been included in the permit for the hazardous air pollutant conditions.

Streamlined Requirements

There are no streamlined requirements for the hazardous air pollutant conditions.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal-operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

Condition B: Permit Expiration

This condition refers to the Board taking action on a permit application. The Board referred to is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ''2.1-20.01:2 and ''10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

This general condition cites the sections that follow:

B. 9 VAC 5-80-80. "Application"
B.2. 9 VAC 5-80-150. "Action on Permit Applications"
B.3. 9 VAC 5-80-80. "Application"
B.4. 9 VAC 5-80-80. "Application"
B.4. 9 VAC 5-80-140. "Permit shield"
B.5. 9 VAC 5-80-80. "Application"

STATE ONLY APPLICABLE REQUIREMENTS

There are no "state only" requirements that apply to this facility.

FUTURE APPLICABLE REQUIREMENTS

The University of Virginia is a major source for hazardous air pollutants. The Maximum Achievable Control Technology Standard (MACT) for Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart DDDDD) under 40 CFR Part 63 and 9 VAC 5 Chapter 60, is scheduled for promulgation in February 2004. The University of Virginia will likely be subject to this standard upon promulgation.

INAPPLICABLE REQUIREMENTS

The University of Virginia did not identify any inapplicable requirements in their application. Therefore, no inapplicable requirements are included in the permit.

COMPLIANCE PLAN

The University of Virginia entered into an Executive Compliance Agreement (ECA) with the Department of Environmental Quality on August 4, 2004. UVA is currently in compliance with the ECA schedule. A copy of the ECA is provided in Attachment D.

Additionally, Section XI of the Title V permit provides additional compliance milestone dates as follows:

- By January 1, 2005, the permittee shall provide to DEQ confirmation of the date by which contracts for emission control systems or process modifications are to be awarded, or confirmation of the date by which orders are to be issued for the purchase of component parts to accomplish emission control or process modification.

- By March 1, 2005, the permittee shall begin on-site construction or installation of emission control equipment or process change.

- By June 1, 2008, the permittee shall have completed on-site construction or installation of emission control equipment or process modification.

- By October 1, 2008, the permittee shall have achieved final compliance.

UVA must also provide written confirmation within 14 days of the dates provided in Section XI..B of the Title V permit that the milestone has been achieved. If the milestone is not achieved by the date required in the compliance schedule, UVA shall, within 14 days of the date, provide a written explanation of the reason the compliance date was not met, a proposed alternate date and a statement as to the impact on the final compliance date.

Lastly, UVA shall submit a certified progress report quarterly detailing the progress made toward completion of the milestones in Section XI.B. The progress report must be certified by a responsible official and shall contain the following:

- Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

- An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0127-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		173000 BTU/hr
0161-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0208-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		264000 BTU/hr
0223-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		212000 BTU/hr
0227-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0227-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0227-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
0227-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0227-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0228-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1096000 BTU/hr
0231-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		808000 BTU/hr
0235-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
0235-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
0243-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0243-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0243-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
0254-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1260000 BTU/hr
0254-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1260000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0255-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		200000 BTU/hr
0255-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		38500 BTU/hr
0255-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		1650000 BTU/hr
0255-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		30000 BTU/hr
0257-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0257-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		75000 BTU/hr
0261-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		4184000 BTU/hr
0263-ICU-01	#2 Fuel oil & N.gas combustion unit	9 VAC 5-80-720 C		797000 BTU/hr
0317-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		93000 BTU/hr
0317-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		93000 BTU/hr
0317-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		74000 BTU/hr
0321-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1096000 BTU/hr
0325-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		80000 BTU/hr
0329-ICU-01	Liquid Propane combustion unit	9 VAC 5-80-720 C		62000 BTU/hr
0331-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		254000 BTU/hr
0334-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		967000 BTU/hr
0356-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		700000 BTU/hr
0373-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		700000 BTU/hr
0396-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1200000 BTU/hr
0396-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1200000 BTU/hr
0436-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		88000 BTU/hr
0436-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		88000 BTU/hr
0436-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		152000 BTU/hr
0439-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0439-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0441-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		422400 BTU/hr
0481-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0481-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0550-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		2501000 BTU/hr
0550-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0550-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0556-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		199000 BTU/hr
0558-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		60000 BTU/hr
0558-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
0558-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
0558-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		528000 BTU/hr
0558-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		375000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0558-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		375000 BTU/hr
0558-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0558-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0558-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		260000 BTU/hr
0580-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		561600 BTU/hr
0583-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		120000 BTU/hr
0583-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		200000 BTU/hr
0583-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
0583-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-07	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-08	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-09	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-10	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
0583-ICU-11	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
0583-ICU-12	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
0583-ICU-13	Natural gas combustion unit	9 VAC 5-80-720 C		40000 BTU/hr
0583-ICU-14	Natural gas combustion unit	9 VAC 5-80-720 C		39500 BTU/hr
0583-ICU-15	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
0583-ICU-16	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
0583-ICU-17	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
0594-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		220000 BTU/hr
0595-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		6277000 BTU/hr
0596-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		835000 BTU/hr
0603-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		857000 BTU/hr
0627-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		173900 BTU/hr
0631-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		664000 BTU/hr
0800-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		299000 BTU/hr
1111-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		70000 BTU/hr
1159-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		250000 BTU/hr
1160-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		162000 BTU/hr
1600-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		907800 BTU/hr
1600-ICU-02	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		675000 BTU/hr
1601-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		150000 BTU/hr
1626-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		620000 BTU/hr
1628-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
1756-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		3450 BTU/hr
1985-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1559000 BTU/hr
1985-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1559000 BTU/hr
2132-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		702000 BTU/hr
2132-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2145-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		455000 BTU/hr
2145-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2164-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		96000 BTU/hr
2164-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2165-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2165-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		90000 BTU/hr
2166-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		70000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2167-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		180000 BTU/hr
2200-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		396600 BTU/hr
2301-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		216000 BTU/hr
2328-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		135000 BTU/hr
2333-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		667000 BTU/hr
2335-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2336-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2337-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2338-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		135000 BTU/hr
2339-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2340-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2341-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2342-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2343-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2345-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		299000 BTU/hr
2346-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		352000 BTU/hr
2346-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		440000 BTU/hr
2347-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		352000 BTU/hr
2348-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2349-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2350-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2351-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2352-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2353-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2354-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2366-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		900000 BTU/hr
2366-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		900000 BTU/hr
2367-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2367-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2381-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1000000 BTU/hr
2385-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1000000 BTU/hr
2411-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2411-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		1582000 BTU/hr
2415-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1139000 BTU/hr
2415-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
2417-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		1139000 BTU/hr
2417-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		50000 BTU/hr
2422-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		130000 BTU/hr
2428-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		369600 BTU/hr
2434-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		480000 BTU/hr
2447-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2447-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		36000 BTU/hr
2447-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		120000 BTU/hr
2448-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		38000 BTU/hr
2448-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		240000 BTU/hr
2566-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		750000 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2566-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2000000 BTU/hr
2605-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		125000 BTU/hr
2606-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		100000 BTU/hr
2607-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		140000 BTU/hr
2616-ICU-01	#2 Fuel oil combustion unit	9 VAC 5-80-720 C		191000 BTU/hr
2638-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		133000 BTU/hr
2641-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		192000 BTU/hr
2642-ICU-01	Propane combustion unit	9 VAC 5-80-720 C		257000 BTU/hr
2801-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2801-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2802-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2802-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2803-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2803-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2804-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2804-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2805-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2805-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2806-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2806-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2807-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2807-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2808-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2808-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2809-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2809-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2810-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2810-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2811-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2811-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2812-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2812-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2813-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2813-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2814-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2814-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2815-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2815-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2816-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2816-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2817-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2817-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2818-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2818-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2819-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2819-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2820-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2820-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2821-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
2821-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2822-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2822-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2823-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2823-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2824-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2824-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2825-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2825-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2826-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2826-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2827-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
2827-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2828-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		199990 BTU/hr
2828-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		650000 BTU/hr
3480-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		316800 BTU/hr
3755-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		930 BTU/hr
3761-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		2484000 BTU/hr
3761-ICU-02	Natural gas combustion unit	9 VAC 5-80-720 C		2484000 BTU/hr
3761-ICU-03	Natural gas combustion unit	9 VAC 5-80-720 C		6100000 BTU/hr
3761-ICU-04	Natural gas combustion unit	9 VAC 5-80-720 C		6100000 BTU/hr
3761-ICU-05	Natural gas combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
3761-ICU-06	Natural gas combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
5262-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		750000 BTU/hr
5262-ICU-02	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		600000 BTU/hr
5271-ICU-01	Natural gas combustion unit	9 VAC 5-80-720 C		645000 BTU/hr
5561-ICU-01	Nat. gas & #2 fuel oil combustion unit	9 VAC 5-80-720 C		950000 BTU/hr
0094-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
0122-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		20 kW
0125-IEG-01R	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0126-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		18 kW
0207-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0207-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0210-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0210-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		260 kW
0210-IEG-03	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
0228-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
0256-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
0256-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		128 kW
0396-IEG-01	Nat. gas emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		40 kW
0401-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		225 kW
0527-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		200 kW
0528-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		75 kW
0534-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		125 kW
0552-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
0555-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		35 kW
0580-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		420 kW
0627-IEG-01	Nat. gas emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		33 kW
1143-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		250 kW
1148-IEG-01	Diesel emergency Fire Pump (<500 hr/yr)	9 VAC 5-80-720 C		113 hp
1154-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		91 kW
1157-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
1172-IEG-03	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		260 kW
1172-IEG-05	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
1176-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		50 kW
1176-IEG-02	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
1181-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		250 kW
1196-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
1600-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
1600-IEG-02	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		60 kW
1697-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		276 kW
1985-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
1994-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		400 kW
2385-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		470 kW

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
5271-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		100 kW
5307-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		81 kW
5307-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		300 kW
5307-IEG-03	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		355 kW
5502-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		25 kW
5506-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		15 kW
5576-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		50 kW
5576-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		90 kW
7103-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		450 kW
7147-IEG-01	#2 fuel oil emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
7533-IEG-01	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		175 kW
7533-IEG-02	Diesel emergency electric generator (<500 hr/yr)	9 VAC 5-80-720 C		150 kW
0596-PRI-02	Printing operations	9 VAC 5-80-720 B	VOC	

Petroleum Storage Tanks

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
Free-Standing Aboveground Storage Tanks						
A7103-6	180	Steel DW	Heating	kerosene	9 VAC 5-8—720 B	VOC
A126-1	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1148-1	275	Steel	fire pump	Diesel	9 VAC 5-8—720 B	VOC
A1157-1	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A527-1	550	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A580-2	1,000	Steel DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1628-1	550	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1626-1	1,000	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
A1600-1	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1600-2	100	Steel	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC
A583-1	550	Steel	waste oil	waste oil	9 VAC 5-8—720 B	VOC
A5576-6	550	Steel DW	motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A256-2	550	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A256-1	650	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A228-1	550	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
A228-2	550	Steel DW	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A0597-1	100	Steel DW	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
A210-2	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A2381-1	550	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A207-1	530	Steel DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
Underground Storage Tanks						
U631-2	1,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7103-5	5,000	Fiberglass DW	Generator (2)	Diesel	9 VAC 5-8—720 B	VOC
U7103-8	20,000	Steel DW Fiberglass coated	Heating	#6 Fuel Oil	9 VAC 5-8—720 B	VOC
U7103-7	20,000	Steel DW Fiberglass coated	Heating	#6 Fuel Oil	9 VAC 5-8—720 B	VOC
U1196-2	1,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1142-2	4,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1176-2	1,000	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1172-2	1,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1181-2	550	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1143-2	1,500	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1985-2	1,000	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U7147-2	550	ACT 100 DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1150-1	6,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U1150-2	15,000	Fiberglass	Generator	Diesel	9 VAC 5-8—720 B	VOC
U580-3	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U603-2	1,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U1600-2	4,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U1600-1	6,000	Fiberglass	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7533-6	10,000	Fiberglass DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U7533-5	20,000	Fiberglass DW	Boiler/Gen	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5561-1	4,000		Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U228-4	10,000	Steel coated with fiberglass	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC
U583-2	10,000	Steel coated with fiberglass	Motor fuel	Diesel	9 VAC 5-8—720 B	VOC
U583-1	10,000	STIP3	Motor fuel	Gasoline	9 VAC 5-8—720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-8—720 B)
U2616-2	1,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5576-4	3,000	Steel StiP3	Gen-Boiler	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U263-2	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U331-1	550	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U334-2	5,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U5262-1	5,000	Steel	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
U231-2	2,000	ACT 100 DW	Heating	#2 Fuel Oil	9 VAC 5-8—720 B	VOC
Above Ground Storage Tank Integral to Generators						
A0094-1	225	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A125-1	75	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A0068-1	500	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A7185-1	2,400	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1994-1	750	Steel Diked	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1155-1	1,100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1154-1	200	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1176-1	75	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A3761-1	1,695	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A0401-1	110	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A534-1	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A1600-3	112	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A2462-1	112	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A550-2	500	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5576-7	224	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5271-1	250	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-4	300	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-1	150	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A210-3	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-3	500	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-2	500	Steel SW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A5307-1	250	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
A207-2	380	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
Aboveground Day Tanks for Generators						
D7103-2	100	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1196-1	100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1985-1	100	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1150-2	275	Steel	Generator	Diesel	9 VAC 5-8—720 B	VOC
D1150-1	300	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC
D256-1	118	Steel DW	Generator	Diesel	9 VAC 5-8—720 B	VOC

The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. Therefore, all portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in the Charlottesville Daily Progress on August 6, 2004. EPA was sent a copy of the draft permit and notified of the public notice on August 6, 2004. West Virginia, the only affected state, was sent a copy of the public notice in a letter dated August 6, 2004. All persons on the Title V mailing list were also sent a copy of the public notice in letters dated August 6, 2004.

Public comments were accepted from August 6, 2004 to September 5, 2004.

ATTACHMENT A

2002 Emissions Inventory

ATTACHMENT B

Minor NSR Permits

ATTACHMENT C

Emissions Calculations

ATTACHMENT D

Executive Compliance Agreement